

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

Claim 1 (currently amended): ~~In a system having a source node and a plurality of consumer nodes, a~~ bandwidth-adaptive method for synchronizing a consumer node representation of a dynamic data set and ~~the~~ source node representation of the dynamic data set, the method comprising the steps of:

(a) receiving, at a communications service from a source node, a metadata packet~~information~~ identifying a plurality of data packets that represent a state of at least a portion of a changing data set at a point in time;

(b) receiving, at the communications service from the source node, at least one of the identified data packets;

(c) selecting at least one of the received data packets responsive to the received metadata ~~packet~~information;

(d) transmitting, from the communications service to a consumer node, the metadata ~~packet~~information; and

(e) transmitting, from the communications service to the consumer node, the selected at least one data packet.

Claim 2 (currently amended): The method of claim 1 further comprising the step of, before step (c), receiving a request from ~~a~~the consumer node for ~~the~~ current state of the changing data set.

Claim 3 (currently amended): The method of claim 2 further comprising the step of repeating steps (a) and (b) until ~~a~~the request is received from ~~a~~the consumer node for the current state of the changing data set.

Claim 4 (currently amended): The method of claim 3 wherein step (c) comprises the steps of:

(c-a) selecting one of the received metadata ~~packets~~information; and

(c-b) selecting at least one of the received data packets identified by the selected metadata ~~packet~~information.

Claim 5 (currently amended): The method of claim 1 wherein step (c) comprises selecting a plurality of the received data packets responsive to the received metadata ~~packet-information~~.

Claim 6 (currently amended): The method of claim 5 wherein step (d) comprises transmitting to ~~at~~the consumer node each of the selected plurality of data packets.

Claim 7 (currently amended): The method of claims 1 wherein step (b) comprises receiving at the communications service from the source node, at least one of the identified data packets in encrypted form.

Claim 8 (currently amended): The method of claim 1 further comprising the step of storing the received metadata ~~packet-information~~ in a memory device.

Claim 9 (original): The method of claim 1 further comprising the step of storing the received at least one data packet in a memory device.

Claim 10 (currently amended): The method of claim 9 wherein step (c) comprises:

(c-a) selecting at least one of the received data packets responsive to the received metadata ~~packet-information~~; and

(c-b) selecting at least one of the stored data packets responsive to the received metadata ~~packet-information~~.

Claim 11 (original): The method of claim 10 where step (e) comprises:

(e-a) transmitting to the consumer node the selected at least one of the received data packets; and

(e-b) transmitting to the consumer node the selected at least one of the stored data packets.

Claim 12 (currently amended): The method of claim 1 further comprising the step of storing, in a memory element, metadata information identifying the at least one data packet transmitted to the consumer node.

Claim 13 (currently amended): The method of claim 12 further comprising the step of selecting at least one of the received data packets responsive to the received metadata ~~packet information~~ and the stored metadata information identifying the at least one data packet transmitted to the consumer node.

Claim 14 (currently amended): A bandwidth-adaptive system for synchronizing consumer node representations and a source node representation of a changing data set, the system comprising:
a source node for transmitting at least one metadata packet, each metadata packet identifying a plurality of data packets that represent ~~the~~ a current state of a changing data set, and for transmitting at least one of the identified data packets; and

a communications service in communication with the source node, the communications service for selecting one of the at least one metadata packet and ~~the~~ at least one data packet for transmission to a first consumer node.

Claim 15 (currently amended): The system of claim 14 further comprising ~~a~~ the first consumer node, and wherein the first consumer node requests the current state of the changing data set from the communications service.

Claim 16 (currently amended): The system of claim 15 wherein the communications service selects one of the at least one metadata packet and the at least one data packet in response to the request made by the first consumer node.

Claim 17 (currently amended): The system of claim 15 further comprising a second consumer node, and wherein the second consumer node requests the current state of the changing data set from the communications service.

Claim 18 (original): The system of claim 17 wherein the source node transmits a plurality of metadata packets, each of the plurality of metadata packets representing one state of the changing data set.

Claim 19 (currently amended): The system of claim 18 wherein the communications service selects a first metadata packet to transmit to the first consumer node and a second metadata packet to transmit to the second consumer node.

Claim 20 (original): The system of claim 14 wherein the communications service further comprises a memory element.

Claim 21 (original): The system of claim 20 wherein the memory element is a persistent storage device.

Claim 22 (original): The system of claim 20 wherein the communications service stores the received at least one metadata packet in the memory element.

Claim 23 (original): The system of claim 20 wherein the communications service stores the received at least one data packet in the memory element.

Claim 24 (currently amended): The system of claim 20 wherein the communications service stores in the memory element information regarding transmission of packets to ~~a~~the first consumer node.

Claim 25 (original): The system of claim 14 wherein the source node encrypts the at least one data packet before transmission to the consumer node.

Claim 26 (currently amended): A communications service for synchronizing consumer node representations and a source node representation of a changing data set, the service comprising:

a receiving subsystem for receiving i) at least one metadata packet identifying ~~at least one plurality of data packets~~ representing ~~the~~ a current state of a changing data set and ii) at least one data packet identified by the received at least one metadata packet;

a synchronization engine for selecting one of the at least one metadata packet and the at least one data packet; and

a transmission subsystem for transmitting the selected one of the at least one metadata packet and the selected at least one data packet.

Claim 27 (original): The communications service of claim 26 further comprising a memory element.

Claim 28 (original): The communications service of claim 26 wherein the synchronization engine selects one of the at least one metadata packet and the at least one data packet in response to a request received from a consumer node.

Claim 29 (currently amended): ~~In a system having a source node and a plurality of consumer nodes, a~~ A bandwidth-adaptive method for synchronizing a consumer node representation of a dynamic data set and ~~the~~ a source node representation of the dynamic data set, the method comprising the steps of:

(a) receiving from a source node a first metadata ~~packet information~~ identifying a first plurality of data packets that represent a state of at least a portion of a changing data set at a first point in time;

(b) receiving from ~~a~~ the source node a second metadata ~~packet information~~ identifying a second plurality of data packets that represent a state of at least a portion of a changing data set at a second point in time;

(c) generating a third metadata ~~packet information~~ representing the difference between the first set of identified data packets and the second set of identified data packets, the third metadata ~~packet information~~ identifying a third plurality of data packets;

(d) transmitting to a consumer node the third metadata ~~packet information~~; and

(e) transmitting to the consumer node at least one of the identified ~~data packets from the~~ third plurality of data packets.